

CLAIMS

1. A method for manufacturing highly pure 2,6-dimethylnaphthalene comprising: a step of performing cooling crystallization of a mixture containing dimethylnaphthalenes which includes 2,6-dimethylnaphthalene; a step of performing solid-liquid separation to obtain a solid component; and a washing step of washing the solid component using a solvent; wherein the solid-liquid separation performed after the cooling crystallization includes press filtration.

2. A method for manufacturing highly pure 2,6-dimethylnaphthalene comprising: a step of performing cooling crystallization of a mixture containing dimethylnaphthalenes which includes 2,6-dimethylnaphthalene; a step of performing solid-liquid separation to obtain a solid component; and a washing step of washing the solid component using a solvent; wherein the washing step is performed at least twice, and a part or the entirety of a mother liquor obtained in a second washing step or in a subsequent washing step is used as a solvent in a washing step performed prior to the washing step at which the mother liquor is obtained.

3. The manufacturing method according to one of Claims 1 and 2, wherein the mixture containing dimethylnaphthalenes

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is a mixture composed of dimethylnaphthalene isomers.

4. The manufacturing method according to one of Claims 1 to 3, wherein the press filtration is performed at a pressure of  $10 \text{ kg/cm}^2$  or more.

5. The manufacturing method according to one of Claims 1 to 4, wherein the mixture containing dimethylnaphthalenes used as a feedstock includes 5 wt% or more of 2,7-dimethylnaphthalene.

6. The manufacturing method according to one of Claims 1 to 5, wherein the cooling crystallization is performed for a mixture containing dimethylnaphthalenes which includes less than 25 wt% of 2,6-dimethylnaphthalene.

7. The manufacturing method according to one of Claims 1 to 6, wherein the washing step is performed for a solid component containing 80% or more of 2,6-dimethylnaphthalene using a solvent, and further comprising steps of performing solid-liquid separation and distillation after the washing step, whereby a 2,6-dimethylnaphthalene having a high purity of 99% or more is obtained.

8. The manufacturing method according to one of Claims 1

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to 7, wherein the solvent used in the washing step is an aliphatic hydrocarbon and/or alicyclic hydrocarbon having 5 to 10 carbon atoms.

9. The manufacturing method according to one of Claims 1 to 8, wherein the press filtration is performed using a tube press.

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